

ATTACHMENT 1

3/17/2009 9:54:00 AM

Urbemis 2007 Version 9 2 4

Summary Report for Summer Emissions (Pounds/Day)

File Name L \DRAFT\3706q\Global\meadowood urb924

Project Name Meadowood Construction

Project Location South Coast AQMD

On-Road Vehicle Emissions Based on Version Emfac2007 V2 3 Nov 1 2006

Off-Road Vehicle Emissions Based on OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	<u>CO2</u>
2012 TOTALS (lbs/day unmitigated)	9,168 77
2012 TOTALS (lbs/day mitigated)	9,168 77
2013 TOTALS (lbs/day unmitigated)	9,168 78
2013 TOTALS (lbs/day mitigated)	9,168 78
2014 TOTALS (lbs/day unmitigated)	9,168 78
2014 TOTALS (lbs/day mitigated)	9,168 78
2015 TOTALS (lbs/day unmitigated)	9,168 79
2015 TOTALS (lbs/day mitigated)	9,168 79
2016 TOTALS (lbs/day unmitigated)	9,168 77
2016 TOTALS (lbs/day mitigated)	9,168 77

3/17/2009 9:54:01 AM

2017 TOTALS (lbs/day unmitigated)	25,889 50
2017 TOTALS (lbs/day mitigated)	25,889 50
2018 TOTALS (lbs/day unmitigated)	25,889 94
2018 TOTALS (lbs/day mitigated)	25,889 94
2019 TOTALS (lbs/day unmitigated)	25,890 60
2019 TOTALS (lbs/day mitigated)	25,890 60
2020 TOTALS (lbs/day unmitigated)	25,891 36
2020 TOTALS (lbs/day mitigated)	25,891 36
2021 TOTALS (lbs/day unmitigated)	25,895 68
2021 TOTALS (lbs/day mitigated)	25,895 68
2022 TOTALS (lbs/day unmitigated)	25,895 68
2022 TOTALS (lbs/day mitigated)	25,895 68
2023 TOTALS (lbs/day unmitigated)	25,895 68
2023 TOTALS (lbs/day mitigated)	25,895 68
2024 TOTALS (lbs/day unmitigated)	25,895 68
2024 TOTALS (lbs/day mitigated)	25,895 68

3/17/2009 9:54:01 AM

2025 TOTALS (lbs/day unmitigated)	245 16
2025 TOTALS (lbs/day mitigated)	245 16

3/17/2009 9:54:25 AM

Urbemis 2007 Version 9 2 4

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name L \DRAFT\3706q\Global\meadowood urb924

Project Name Meadowood Construction

Project Location South Coast AQMD

On-Road Vehicle Emissions Based on Version Emfac2007 V2 3 Nov 1 2006

Off-Road Vehicle Emissions Based on OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	<u>CO2</u>
Time Slice 1/3/2012-1/13/2012	4,295 41
Active Days: 9	
Demolition 01/03/2012-01/13/2012	4,295 41
Fugitive Dust	0 00
Demo Off Road Diesel	4,132 45
Demo On Road Diesel	0 00
Demo Worker Trips	162 95
Time Slice 1/16/2012-12/31/2012	<u>9,168.77</u>
Active Days: 251	
Mass Grading 01/16/2012-12/12/2014	9,168 77
Mass Grading Dust	0 00
Mass Grading Off Road Diesel	8,842 87
Mass Grading On Road Diesel	0 00
Mass Grading Worker Trips	325 90

3/17/2009 9:54:25 AM

Time Slice 1/1/2013-12/31/2013 9,168.78
 Active Days: 261

Mass Grading 01/16/2012-
 12/12/2014 9,168 78

Mass Grading Dust 0 00

Mass Grading Off Road Diesel 8,842 87

Mass Grading On Road Diesel 0 00

Mass Grading Worker Trips 325 91

Time Slice 1/1/2014-12/12/2014 9,168.78
 Active Days: 248

Mass Grading 01/16/2012-
 12/12/2014 9,168 78

Mass Grading Dust 0 00

Mass Grading Off Road Diesel 8,842 87

Mass Grading On Road Diesel 0 00

Mass Grading Worker Trips 325 92

Time Slice 12/15/2014-12/31/2014 9,168.78
 Active Days: 13

Fine Grading 12/15/2014-
 03/18/2016 9,168 78

Fine Grading Dust 0 00

Fine Grading Off Road Diesel 8,842 87

Fine Grading On Road Diesel 0 00

Fine Grading Worker Trips 325 92

Time Slice 1/1/2015-12/31/2015 9,168.79
 Active Days: 261

Fine Grading 12/15/2014-
 03/18/2016 9,168 79

Fine Grading Dust 0 00

Fine Grading Off Road Diesel 8,842 87

Fine Grading On Road Diesel 0 00

Fine Grading Worker Trips 325 92

3/17/2009 9:54:25 AM

Time Slice 1/1/2016-3/18/2016	<u>9,168.77</u>
Active Days 56	
Fine Grading 12/15/2014-03/18/2016	9,168 77
Fine Grading Dust	0 00
Fine Grading Off Road Diesel	8,842 87
Fine Grading On Road Diesel	0 00
Fine Grading Worker Trips	325 91
Time Slice 3/21/2016-8/19/2016	1,845 00
Active Days 110	
Trenching 03/21/2016-08/19/2016	1,845 00
Trenching Off Road Diesel	1,714 64
Trenching Worker Trips	130 36
Time Slice 8/22/2016-12/30/2016	2,302 66
Active Days: 95	
Asphalt 08/22/2016-01/20/2017	2,302 66
Paving Off-Gas	0 00
Paving Off Road Diesel	1,418 81
Paving On Road Diesel	720 89
Paving Worker Trips	162 95
Time Slice 1/2/2017-1/20/2017	2,302 65
Active Days 15	
Asphalt 08/22/2016-01/20/2017	2,302 65
Paving Off-Gas	0 00
Paving Off Road Diesel	1,418 81
Paving On Road Diesel	720 89
Paving Worker Trips	162 95

3/17/2009 9:54:25 AM

Time Slice 1/23/2017-12/29/2017 25,889.50
Active Days: 245

Building 01/23/2017-05/17/2024 25,889 50

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,244 55

Building Worker Trips 18,385 67

Time Slice 1/1/2018-12/31/2018 25,889.94
Active Days 261

Building 01/23/2017-05/17/2024 25,889 94

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,244 88

Building Worker Trips 18,385 78

Time Slice 1/1/2019-12/31/2019 25,890.60
Active Days: 261

Building 01/23/2017-05/17/2024 25,890 60

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,245 21

Building Worker Trips 18,386 11

Time Slice 1/1/2020-12/31/2020 25,891.36
Active Days: 262

Building 01/23/2017-05/17/2024 25,891 36

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,245 55

Building Worker Trips 18,386 53

Time Slice 1/1/2021-12/31/2021 25,895.68
Active Days 261

Building 01/23/2017-05/17/2024 25,895 68

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,247 02

Building Worker Trips 18,389 38

3/17/2009 9:54:25 AM

Time Slice 1/3/2022-12/30/2022	<u>25,895.68</u>
Active Days 260	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 1/2/2023-12/29/2023	<u>25,895.68</u>
Active Days: 260	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 1/1/2024-5/17/2024	<u>25,895.68</u>
Active Days: 100	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 5/20/2024-12/31/2024	245 16
Active Days: 162	
Coating 05/20/2024-05/23/2025	245 16
Architectural Coating	0 00
Coating Worker Trips	245 16
Time Slice 1/1/2025-5/23/2025	<u>245.16</u>
Active Days 103	
Coating 05/20/2024-05/23/2025	245 16
Architectural Coating	0 00
Coating Worker Trips	245 16

Phase Assumptions

Phase Demolition 1/3/2012 - 1/13/2012 - Default Demolition Description
Building Volume Total (cubic feet) 0

3/17/2009 9:54:25 AM

Building Volume Daily (cubic feet) 0

On Road Truck Travel (VMT) 0

Off-Road Equipment

3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase Fine Grading 12/15/2014 - 3/18/2016 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed 208.5

Maximum Daily Acreage Disturbed 52.12

Fugitive Dust Level of Detail Default

20 lbs per acre-day

On Road Truck Travel (VMT) 0

Off-Road Equipment

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase Mass Grading 1/16/2012 - 12/12/2014 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed 208.5

Maximum Daily Acreage Disturbed 52.12

Fugitive Dust Level of Detail Default

20 lbs per acre-day

On Road Truck Travel (VMT) 0

Off-Road Equipment

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase Trenching 3/21/2016 - 8/19/2016 - Default Trenching Description

3/17/2009 9:54:25 AM

Off-Road Equipment

- 2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase Paving 8/22/2016 - 1/20/2017 - Default Paving Description

Acres to be Paved 52.12

Off-Road Equipment

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase Building Construction 1/23/2017 - 5/17/2024 - Default Building Construction Description

Off-Road Equipment

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase Architectural Coating 5/20/2024 - 5/23/2025 - Default Architectural Coating Description

- Rule Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100
- Rule Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50
- Rule Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250
- Rule Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100
- Rule Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
- Rule Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

3/17/2009 9:54:52 AM

Urbemis 2007 Version 9 2 4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name L \DRAFT\3706q\Global\meadowood urb924

Project Name Meadowood Construction

Project Location South Coast AQMD

On-Road Vehicle Emissions Based on Version Emfac2007 V2 3 Nov 1 2006

Off-Road Vehicle Emissions Based on OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

	<u>CO2</u>
Time Slice 1/3/2012-1/13/2012	4,295 41
Active Days: 9	
Demolition 01/03/2012-01/13/2012	4,295 41
Fugitive Dust	0 00
Demo Off Road Diesel	4,132 45
Demo On Road Diesel	0 00
Demo Worker Trips	162 95
Time Slice 1/16/2012-12/31/2012	<u>9,168.77</u>
Active Days: 251	
Mass Grading 01/16/2012-12/12/2014	9,168 77
Mass Grading Dust	0 00
Mass Grading Off Road Diesel	8,842 87
Mass Grading On Road Diesel	0 00
Mass Grading Worker Trips	325 90

3/17/2009 9:54:52 AM

Time Slice 1/1/2013-12/31/2013 9,168.78
 Active Days 261

Mass Grading 01/16/2012-12/12/2014 9,168 78

Mass Grading Dust 0 00

Mass Grading Off Road Diesel 8,842 87

Mass Grading On Road Diesel 0 00

Mass Grading Worker Trips 325 91

Time Slice 1/1/2014-12/12/2014 9,168.78
 Active Days: 248

Mass Grading 01/16/2012-12/12/2014 9,168 78

Mass Grading Dust 0 00

Mass Grading Off Road Diesel 8,842 87

Mass Grading On Road Diesel 0 00

Mass Grading Worker Trips 325 92

Time Slice 12/15/2014-12/31/2014 9,168.78
 Active Days: 13

Fine Grading 12/15/2014-03/18/2016 9,168 78

Fine Grading Dust 0 00

Fine Grading Off Road Diesel 8,842 87

Fine Grading On Road Diesel 0 00

Fine Grading Worker Trips 325 92

Time Slice 1/1/2015-12/31/2015 9,168.79
 Active Days 261

Fine Grading 12/15/2014-03/18/2016 9,168 79

Fine Grading Dust 0 00

Fine Grading Off Road Diesel 8,842 87

Fine Grading On Road Diesel 0 00

Fine Grading Worker Trips 325 92

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Time Slice 1/1/2016-3/18/2016	<u>9,168.77</u>
Active Days: 56	
Fine Grading 12/15/2014-03/18/2016	9,168 77
Fine Grading Dust	0 00
Fine Grading Off Road Diesel	8,842 87
Fine Grading On Road Diesel	0 00
Fine Grading Worker Trips	325 91
Time Slice 3/21/2016-8/19/2016	1,845 00
Active Days: 110	
Trenching 03/21/2016-08/19/2016	1,845 00
Trenching Off Road Diesel	1,714 64
Trenching Worker Trips	130 36
Time Slice 8/22/2016-12/30/2016	2,302 66
Active Days: 95	
Asphalt 08/22/2016-01/20/2017	2,302 66
Paving Off-Gas	0 00
Paving Off Road Diesel	1,418 81
Paving On Road Diesel	720 89
Paving Worker Trips	162 95
Time Slice 1/2/2017-1/20/2017	2,302 65
Active Days: 15	
Asphalt 08/22/2016-01/20/2017	2,302 65
Paving Off-Gas	0 00
Paving Off Road Diesel	1,418 81
Paving On Road Diesel	720 89
Paving Worker Trips	162 95

3/17/2009 9:54:52 AM

Time Slice 1/23/2017-12/29/2017 25,889.50
Active Days: 245

Building 01/23/2017-05/17/2024 25,889 50

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,244 55

Building Worker Trips 18,385 67

Time Slice 1/1/2018-12/31/2018 25,889.94
Active Days 261

Building 01/23/2017-05/17/2024 25,889 94

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,244 88

Building Worker Trips 18,385 78

Time Slice 1/1/2019-12/31/2019 25,890.60
Active Days: 261

Building 01/23/2017-05/17/2024 25,890 60

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,245 21

Building Worker Trips 18,386 11

Time Slice 1/1/2020-12/31/2020 25,891.36
Active Days: 262

Building 01/23/2017-05/17/2024 25,891 36

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,245 55

Building Worker Trips 18,386 53

Time Slice 1/1/2021-12/31/2021 25,895.68
Active Days 261

Building 01/23/2017-05/17/2024 25,895 68

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,247 02

Building Worker Trips 18,389 38

3/17/2009 9:54:52 AM

Time Slice 1/3/2022-12/30/2022	<u>25,895.68</u>
Active Days 260	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 1/2/2023-12/29/2023	<u>25,895.68</u>
Active Days 260	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 1/1/2024-5/17/2024	<u>25,895.68</u>
Active Days: 100	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 5/20/2024-12/31/2024	245 16
Active Days: 162	
Coating 05/20/2024-05/23/2025	245 16
Architectural Coating	0 00
Coating Worker Trips	245 16
Time Slice 1/1/2025-5/23/2025	<u>245.16</u>
Active Days: 103	
Coating 05/20/2024-05/23/2025	245 16
Architectural Coating	0 00
Coating Worker Trips	245 16

Construction Related Mitigation Measures

The following mitigation measures apply to Phase Fine Grading 12/15/2014 - 3/18/2016 - Default Fine Site Grading/Excavation

Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by

3/17/2009 9:54:52 AM

PM10 84% PM25 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by

PM10 5% PM25 5%

For Soil Stabilizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by

PM10 44% PM25 44%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

The following mitigation measures apply to Phase Mass Grading 1/16/2012 - 12/12/2014 - Default Mass Site Grading/Excavation
Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by

PM10 84% PM25 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by

PM10 5% PM25 5%

For Soil Stabilizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by

PM10 44% PM25 44%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

Phase Assumptions

Phase Demolition 1/3/2012 - 1/13/2012 - Default Demolition Description

Building Volume Total (cubic feet) 0

Building Volume Daily (cubic feet) 0

On Road Truck Travel (VMT) 0

Off-Road Equipment

3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase Fine Grading 12/15/2014 - 3/18/2016 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed 208.5

Maximum Daily Acreage Disturbed 52.12

Fugitive Dust Level of Detail Default

3/17/2009 9:54:52 AM

20 lbs per acre-day

On Road Truck Travel (VMT) 0

Off-Road Equipment

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase Mass Grading 1/16/2012 - 12/12/2014 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed 208.5

Maximum Daily Acreage Disturbed 52.12

Fugitive Dust Level of Detail Default

20 lbs per acre-day

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1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

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1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase Trenching 3/21/2016 - 8/19/2016 - Default Trenching Description

Off-Road Equipment

2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase Paving 8/22/2016 - 1/20/2017 - Default Paving Description

Acres to be Paved 52.12

Off-Road Equipment

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

3/17/2009 9:54:52 AM

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Phase Building Construction 1/23/2017 - 5/17/2024 - Default Building Construction Description

Off-Road Equipment

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

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3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase Architectural Coating 5/20/2024 - 5/23/2025 - Default Architectural Coating Description

Rule Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

3/17/2009 9:55:27 AM

Urbemis 2007 Version 9 2 4

Summary Report for Winter Emissions (Pounds/Day)

File Name L \DRAFT\3706q\Global\meadowood urb924

Project Name Meadowood Construction

Project Location South Coast AQMD

On-Road Vehicle Emissions Based on Version Emfac2007 V2 3 Nov 1 2006

Off-Road Vehicle Emissions Based on OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

CO2

2012 TOTALS (lbs/day unmitigated) 9,168 77

2012 TOTALS (lbs/day mitigated) 9,168 77

2013 TOTALS (lbs/day unmitigated) 9,168 78

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2016 TOTALS (lbs/day mitigated) 9,168 77

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2019 TOTALS (lbs/day unmitigated)	25,890 60
2019 TOTALS (lbs/day mitigated)	25,890 60
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2025 TOTALS (lbs/day unmitigated)	245 16
2025 TOTALS (lbs/day mitigated)	245 16

3/17/2009 9:55:41 AM

Urbemis 2007 Version 9 2 4

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

File Name L \DRAFT\3706q\Global\meadowood urb924

Project Name Meadowood Construction

Project Location South Coast AQMD

On-Road Vehicle Emissions Based on Version Emfac2007 V2 3 Nov 1 2006

Off-Road Vehicle Emissions Based on OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

	<u>CO2</u>
Time Slice 1/3/2012-1/13/2012	4,295 41
Active Days: 9	
Demolition 01/03/2012-01/13/2012	4,295 41
Fugitive Dust	0 00
Demo Off Road Diesel	4,132 45
Demo On Road Diesel	0 00
Demo Worker Trips	162 95
Time Slice 1/16/2012-12/31/2012	<u>9,168.77</u>
Active Days: 251	
Mass Grading 01/16/2012-12/12/2014	9,168 77
Mass Grading Dust	0 00
Mass Grading Off Road Diesel	8,842 87
Mass Grading On Road Diesel	0 00
Mass Grading Worker Trips	325 90

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Time Slice 1/1/2013-12/31/2013	<u>9,168.78</u>
Active Days 261	
Mass Grading 01/16/2012-12/12/2014	9,168 78
Mass Grading Dust	0 00
Mass Grading Off Road Diesel	8,842 87
Mass Grading On Road Diesel	0 00
Mass Grading Worker Trips	325 91
Time Slice 1/1/2014-12/12/2014	<u>9,168.78</u>
Active Days: 248	
Mass Grading 01/16/2012-12/12/2014	9,168 78
Mass Grading Dust	0 00
Mass Grading Off Road Diesel	8,842 87
Mass Grading On Road Diesel	0 00
Mass Grading Worker Trips	325 92
Time Slice 12/15/2014-12/31/2014	<u>9,168.78</u>
Active Days: 13	
Fine Grading 12/15/2014-03/18/2016	9,168 78
Fine Grading Dust	0 00
Fine Grading Off Road Diesel	8,842 87
Fine Grading On Road Diesel	0 00
Fine Grading Worker Trips	325 92
Time Slice 1/1/2015-12/31/2015	<u>9,168.79</u>
Active Days: 261	
Fine Grading 12/15/2014-03/18/2016	9,168 79
Fine Grading Dust	0 00
Fine Grading Off Road Diesel	8,842 87
Fine Grading On Road Diesel	0 00
Fine Grading Worker Trips	325 92

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Time Slice 1/1/2016-3/18/2016	<u>9,168.77</u>
Active Days: 56	
Fine Grading 12/15/2014-03/18/2016	9,168 77
Fine Grading Dust	0 00
Fine Grading Off Road Diesel	8,842 87
Fine Grading On Road Diesel	0 00
Fine Grading Worker Trips	325 91
Time Slice 3/21/2016-8/19/2016	1,845 00
Active Days: 110	
Trenching 03/21/2016-08/19/2016	1,845 00
Trenching Off Road Diesel	1,714 64
Trenching Worker Trips	130 36
Time Slice 8/22/2016-12/30/2016	2,302 66
Active Days: 95	
Asphalt 08/22/2016-01/20/2017	2,302 66
Paving Off-Gas	0 00
Paving Off Road Diesel	1,418 81
Paving On Road Diesel	720 89
Paving Worker Trips	162 95
Time Slice 1/2/2017-1/20/2017	2,302 65
Active Days: 15	
Asphalt 08/22/2016-01/20/2017	2,302 65
Paving Off-Gas	0 00
Paving Off Road Diesel	1,418 81
Paving On Road Diesel	720 89
Paving Worker Trips	162 95

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Time Slice 1/23/2017-12/29/2017 25,889.50
Active Days: 245

Building 01/23/2017-05/17/2024	25,889 50
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,244 55
Building Worker Trips	18,385 67

Time Slice 1/1/2018-12/31/2018 25,889.94
Active Days 261

Building 01/23/2017-05/17/2024	25,889 94
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,244 88
Building Worker Trips	18,385 78

Time Slice 1/1/2019-12/31/2019 25,890.60
Active Days: 261

Building 01/23/2017-05/17/2024	25,890 60
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,245 21
Building Worker Trips	18,386 11

Time Slice 1/1/2020-12/31/2020 25,891.36
Active Days: 262

Building 01/23/2017-05/17/2024	25,891 36
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,245 55
Building Worker Trips	18,386 53

Time Slice 1/1/2021-12/31/2021 25,895.68
Active Days: 261

Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38

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Time Slice 1/3/2022-12/30/2022	<u>25,895.68</u>
Active Days: 260	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 1/2/2023-12/29/2023	<u>25,895.68</u>
Active Days: 260	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 1/1/2024-5/17/2024	<u>25,895.68</u>
Active Days: 100	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 5/20/2024-12/31/2024	245 16
Active Days: 162	
Coating 05/20/2024-05/23/2025	245 16
Architectural Coating	0 00
Coating Worker Trips	245 16
Time Slice 1/1/2025-5/23/2025	<u>245.16</u>
Active Days: 103	
Coating 05/20/2024-05/23/2025	245 16
Architectural Coating	0 00
Coating Worker Trips	245 16

Phase Assumptions

Phase Demolition 1/3/2012 - 1/13/2012 - Default Demolition Description
Building Volume Total (cubic feet) 0

3/17/2009 9:55:41 AM

Building Volume Daily (cubic feet) 0

On Road Truck Travel (VMT) 0

Off-Road Equipment

3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase Fine Grading 12/15/2014 - 3/18/2016 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed 208.5

Maximum Daily Acreage Disturbed 52.12

Fugitive Dust Level of Detail Default

20 lbs per acre-day

On Road Truck Travel (VMT) 0

Off-Road Equipment

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase Mass Grading 1/16/2012 - 12/12/2014 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed 208.5

Maximum Daily Acreage Disturbed 52.12

Fugitive Dust Level of Detail Default

20 lbs per acre-day

On Road Truck Travel (VMT) 0

Off-Road Equipment

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase Trenching 3/21/2016 - 8/19/2016 - Default Trenching Description

3/17/2009 9:55:41 AM

Off-Road Equipment

- 2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase Paving 8/22/2016 - 1/20/2017 - Default Paving Description

Acres to be Paved 52.12

Off-Road Equipment

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase Building Construction 1/23/2017 - 5/17/2024 - Default Building Construction Description

Off-Road Equipment

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase Architectural Coating 5/20/2024 - 5/23/2025 - Default Architectural Coating Description

- Rule Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100
 - Rule Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50
 - Rule Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250
 - Rule Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100
 - Rule Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
 - Rule Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
-

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Urbemis 2007 Version 9 2 4

Detail Report for Winter Construction Mitigated Emissions (Pounds/Day)

File Name L \DRAFT\3706q\Global\meadowood urb924

Project Name Meadowood Construction

Project Location South Coast AQMD

On-Road Vehicle Emissions Based on Version Emfac2007 V2 3 Nov 1 2006

Off-Road Vehicle Emissions Based on OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Mitigated)

CO2

Time Slice 1/3/2012-1/13/2012 4,295 41
 Active Days: 9

Demolition 01/03/2012- 4,295 41
 01/13/2012

Fugitive Dust 0 00

Demo Off Road Diesel 4,132 45

Demo On Road Diesel 0 00

Demo Worker Trips 162 95

Time Slice 1/16/2012-12/31/2012 9,168.77
 Active Days: 251

Mass Grading 01/16/2012- 9,168 77
 12/12/2014

Mass Grading Dust 0 00

Mass Grading Off Road Diesel 8,842 87

Mass Grading On Road Diesel 0 00

Mass Grading Worker Trips 325 90

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Time Slice 1/1/2013-12/31/2013 9,168.78
Active Days 261

Mass Grading 01/16/2012-12/12/2014 9,168 78

Mass Grading Dust 0 00

Mass Grading Off Road Diesel 8,842 87

Mass Grading On Road Diesel 0 00

Mass Grading Worker Trips 325 91

Time Slice 1/1/2014-12/12/2014 9,168.78
Active Days: 248

Mass Grading 01/16/2012-12/12/2014 9,168 78

Mass Grading Dust 0 00

Mass Grading Off Road Diesel 8,842 87

Mass Grading On Road Diesel 0 00

Mass Grading Worker Trips 325 92

Time Slice 12/15/2014-12/31/2014 9,168.78
Active Days: 13

Fine Grading 12/15/2014-03/18/2016 9,168 78

Fine Grading Dust 0 00

Fine Grading Off Road Diesel 8,842 87

Fine Grading On Road Diesel 0 00

Fine Grading Worker Trips 325 92

Time Slice 1/1/2015-12/31/2015 9,168.79
Active Days 261

Fine Grading 12/15/2014-03/18/2016 9,168 79

Fine Grading Dust 0 00

Fine Grading Off Road Diesel 8,842 87

Fine Grading On Road Diesel 0 00

Fine Grading Worker Trips 325 92

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Time Slice 1/1/2016-3/18/2016 9,168.77
Active Days: 56

Fine Grading 12/15/2014-03/18/2016 9,168 77

Fine Grading Dust 0 00

Fine Grading Off Road Diesel 8,842 87

Fine Grading On Road Diesel 0 00

Fine Grading Worker Trips 325 91

Time Slice 3/21/2016-8/19/2016 1,845 00
Active Days: 110

Trenching 03/21/2016-08/19/2016 1,845 00

Trenching Off Road Diesel 1,714 64

Trenching Worker Trips 130 36

Time Slice 8/22/2016-12/30/2016 2,302 66
Active Days: 95

Asphalt 08/22/2016-01/20/2017 2,302 66

Paving Off-Gas 0 00

Paving Off Road Diesel 1,418 81

Paving On Road Diesel 720 89

Paving Worker Trips 162 95

Time Slice 1/2/2017-1/20/2017 2,302 65
Active Days 15

Asphalt 08/22/2016-01/20/2017 2,302 65

Paving Off-Gas 0 00

Paving Off Road Diesel 1,418 81

Paving On Road Diesel 720 89

Paving Worker Trips 162 95

3/17/2009 9:56:01 AM

Time Slice 1/23/2017-12/29/2017 25,889.50
Active Days: 245

Building 01/23/2017-05/17/2024 25,889 50

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,244 55

Building Worker Trips 18,385 67

Time Slice 1/1/2018-12/31/2018 25,889.94
Active Days 261

Building 01/23/2017-05/17/2024 25,889 94

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,244 88

Building Worker Trips 18,385 78

Time Slice 1/1/2019-12/31/2019 25,890.60
Active Days: 261

Building 01/23/2017-05/17/2024 25,890 60

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,245 21

Building Worker Trips 18,386 11

Time Slice 1/1/2020-12/31/2020 25,891.36
Active Days: 262

Building 01/23/2017-05/17/2024 25,891 36

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,245 55

Building Worker Trips 18,386 53

Time Slice 1/1/2021-12/31/2021 25,895.68
Active Days 261

Building 01/23/2017-05/17/2024 25,895 68

Building Off Road Diesel 2,259 28

Building Vendor Trips 5,247 02

Building Worker Trips 18,389 38

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Time Slice 1/3/2022-12/30/2022	<u>25,895.68</u>
Active Days: 260	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 1/2/2023-12/29/2023	<u>25,895.68</u>
Active Days: 260	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 1/1/2024-5/17/2024	<u>25,895.68</u>
Active Days 100	
Building 01/23/2017-05/17/2024	25,895 68
Building Off Road Diesel	2,259 28
Building Vendor Trips	5,247 02
Building Worker Trips	18,389 38
Time Slice 5/20/2024-12/31/2024	245 16
Active Days: 162	
Coating 05/20/2024-05/23/2025	245 16
Architectural Coating	0 00
Coating Worker Trips	245 16
Time Slice 1/1/2025-5/23/2025	<u>245.16</u>
Active Days 103	
Coating 05/20/2024-05/23/2025	245 16
Architectural Coating	0 00
Coating Worker Trips	245 16

Construction Related Mitigation Measures

The following mitigation measures apply to Phase Fine Grading 12/15/2014 - 3/18/2016 - Default Fine Site Grading/Excavation

Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by

3/17/2009 9:56:01 AM

PM10 84% PM25 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by

PM10 5% PM25 5%

For Soil Stabilizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by

PM10 44% PM25 44%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

The following mitigation measures apply to Phase Mass Grading 1/16/2012 - 12/12/2014 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by

PM10 84% PM25 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by

PM10 5% PM25 5%

For Soil Stabilizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by

PM10 44% PM25 44%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

Phase Assumptions

Phase Demolition 1/3/2012 - 1/13/2012 - Default Demolition Description

Building Volume Total (cubic feet) 0

Building Volume Daily (cubic feet) 0

On Road Truck Travel (VMT) 0

Off-Road Equipment

3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase Fine Grading 12/15/2014 - 3/18/2016 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed 208.5

Maximum Daily Acreage Disturbed 52.12

Fugitive Dust Level of Detail Default

3/17/2009 9:56:01 AM

20 lbs per acre-day

On Road Truck Travel (VMT) 0

Off-Road Equipment

- 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day
- 3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day
- 3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase Mass Grading 1/16/2012 - 12/12/2014 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed 208.5

Maximum Daily Acreage Disturbed 52.12

Fugitive Dust Level of Detail Default

20 lbs per acre-day

On Road Truck Travel (VMT) 0

Off-Road Equipment

- 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day
- 3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day
- 3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase Trenching 3/21/2016 - 8/19/2016 - Default Trenching Description

Off-Road Equipment

- 2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase Paving 8/22/2016 - 1/20/2017 - Default Paving Description

Acres to be Paved 52.12

Off-Road Equipment

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
 - 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
-

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2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase Building Construction 1/23/2017 - 5/17/2024 - Default Building Construction Description
Off-Road Equipment

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase Architectural Coating 5/20/2024 - 5/23/2025 - Default Architectural Coating Description

Rule Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Summary Report for Annual Emissions (Tons/Year)

File Name L \DRAFT\3706q\Global\meadowood urb924

Project Name Meadowood Construction

Project Location South Coast AQMD

On-Road Vehicle Emissions Based on Version Emfac2007 V2 3 Nov 1 2006

Off-Road Vehicle Emissions Based on OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	<u>CO2</u>
2012 TOTALS (tons/year unmitigated)	1,170 01
2012 TOTALS (tons/year mitigated)	1,170 01
Percent Reduction	0 00
2013 TOTALS (tons/year unmitigated)	1,196 53
2013 TOTALS (tons/year mitigated)	1,196 53
Percent Reduction	0 00
2014 TOTALS (tons/year unmitigated)	1,196 53
2014 TOTALS (tons/year mitigated)	1,196 53
Percent Reduction	0 00
2015 TOTALS (tons/year unmitigated)	1,196 53
2015 TOTALS (tons/year mitigated)	1,196 53

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Percent Reduction	0 00
2016 TOTALS (tons/year unmitigated)	467 58
2016 TOTALS (tons/year mitigated)	467 58
Percent Reduction	0 00
2017 TOTALS (tons/year unmitigated)	3,188 73
2017 TOTALS (tons/year mitigated)	3,188 73
Percent Reduction	0 00
2018 TOTALS (tons/year unmitigated)	3,378 64
2018 TOTALS (tons/year mitigated)	3,378 64
Percent Reduction	0 00
2019 TOTALS (tons/year unmitigated)	3,378 72
2019 TOTALS (tons/year mitigated)	3,378 72
Percent Reduction	0 00
2020 TOTALS (tons/year unmitigated)	3,391 77
2020 TOTALS (tons/year mitigated)	3,391 77
Percent Reduction	0 00
2021 TOTALS (tons/year unmitigated)	3,379 39
2021 TOTALS (tons/year mitigated)	3,379 39

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Percent Reduction	0 00
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2022 TOTALS (tons/year unmitigated)	3,366 44
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2022 TOTALS (tons/year mitigated)	3,366 44
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Percent Reduction	0 00
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2023 TOTALS (tons/year unmitigated)	3,366 44
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2023 TOTALS (tons/year mitigated)	3,366 44
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Percent Reduction	0 00
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2024 TOTALS (tons/year unmitigated)	1,314 64
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2024 TOTALS (tons/year mitigated)	1,314 64
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Percent Reduction	0 00
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2025 TOTALS (tons/year unmitigated)	12 63
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2025 TOTALS (tons/year mitigated)	12 63
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Percent Reduction	0 00
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Urbemis 2007 Version 9 2 4

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name L:\DRAFT\3706q\Global\meadowood urb924

Project Name Meadowood Construction

Project Location South Coast AQMD

On-Road Vehicle Emissions Based on Version Emfac2007 V2 3 Nov 1 2006

Off-Road Vehicle Emissions Based on OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	<u>CO2</u>
2012	1,170 01
Demolition 01/03/2012- 01/13/2012	19 33
Fugitive Dust	0 00
Demo Off Road Diesel	18 60
Demo On Road Diesel	0 00
Demo Worker Trips	0 73
Mass Grading 01/16/2012- 12/12/2014	1,150 68
Mass Grading Dust	0 00
Mass Grading Off Road Diesel	1,109 78
Mass Grading On Road Diesel	0 00
Mass Grading Worker Trips	40 90
2013	1,196 53
Mass Grading 01/16/2012- 12/12/2014	1,196 53
Mass Grading Dust	0 00
Mass Grading Off Road Diesel	1,153 99
Mass Grading On Road Diesel	0 00
Mass Grading Worker Trips	42 53

3/17/2009 9:56:32 AM

2014	1,196 53
Mass Grading 01/16/2012- 12/12/2014	1,136 93
Mass Grading Dust	0 00
Mass Grading Off Road Diesel	1,096 52
Mass Grading On Road Diesel	0 00
Mass Grading Worker Trips	40 41
Fine Grading 12/15/2014- 03/18/2016	59 60
Fine Grading Dust	0 00
Fine Grading Off Road Diesel	57 48
Fine Grading On Road Diesel	0 00
Fine Grading Worker Trips	2 12
2015	1,196 53
Fine Grading 12/15/2014- 03/18/2016	1,196 53
Fine Grading Dust	0 00
Fine Grading Off Road Diesel	1,153 99
Fine Grading On Road Diesel	0 00
Fine Grading Worker Trips	42 53

3/17/2009 9:56:32 AM

2016	467 58
Fine Grading 12/15/2014-03/18/2016	256 73
Fine Grading Dust	0 00
Fine Grading Off Road Diesel	247 60
Fine Grading On Road Diesel	0 00
Fine Grading Worker Trips	9 13
Trenching 03/21/2016-08/19/2016	101 48
Trenching Off Road Diesel	94 31
Trenching Worker Trips	7 17
Asphalt 08/22/2016-01/20/2017	109 38
Paving Off-Gas	0 00
Paving Off Road Diesel	67 39
Paving On Road Diesel	34 24
Paving Worker Trips	7 74
2017	3,188 73
Asphalt 08/22/2016-01/20/2017	17 27
Paving Off-Gas	0 00
Paving Off Road Diesel	10 64
Paving On Road Diesel	5 41
Paving Worker Trips	1 22
Building 01/23/2017-05/17/2024	3,171 46
Building Off Road Diesel	276 76
Building Vendor Trips	642 46
Building Worker Trips	2,252 24

3/17/2009 9:56:32 AM

2018	3,378 64
Building 01/23/2017-05/17/2024	3,378 64
Building Off Road Diesel	294 84
Building Vendor Trips	684 46
Building Worker Trips	2,399 34
2019	3,378 72
Building 01/23/2017-05/17/2024	3,378 72
Building Off Road Diesel	294 84
Building Vendor Trips	684 50
Building Worker Trips	2,399 39
2020	3,391 77
Building 01/23/2017-05/17/2024	3,391 77
Building Off Road Diesel	295 97
Building Vendor Trips	687 17
Building Worker Trips	2,408 64
2021	3,379 39
Building 01/23/2017-05/17/2024	3,379 39
Building Off Road Diesel	294 84
Building Vendor Trips	684 74
Building Worker Trips	2,399 81
2022	3,366 44
Building 01/23/2017-05/17/2024	3,366 44
Building Off Road Diesel	293 71
Building Vendor Trips	682 11
Building Worker Trips	2,390 62

3/17/2009 9:56:32 AM

2023	3,366 44
Building 01/23/2017-05/17/2024	3,366 44
Building Off Road Diesel	293 71
Building Vendor Trips	682 11
Building Worker Trips	2,390 62
2024	1,314 64
Building 01/23/2017-05/17/2024	1,294 78
Building Off Road Diesel	112 96
Building Vendor Trips	262 35
Building Worker Trips	919 47
Coating 05/20/2024-05/23/2025	19 86
Architectural Coating	0 00
Coating Worker Trips	19 86
2025	12 63
Coating 05/20/2024-05/23/2025	12 63
Architectural Coating	0 00
Coating Worker Trips	12 63

Phase Assumptions

Phase Demolition 1/3/2012 - 1/13/2012 - Default Demolition Description

Building Volume Total (cubic feet) 0

Building Volume Daily (cubic feet) 0

On Road Truck Travel (VMT) 0

Off-Road Equipment

3 Excavators (168 hp) operating at a 0 57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0 59 load factor for 8 hours per day

Phase Fine Grading 12/15/2014 - 3/18/2016 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed 208 5

Maximum Daily Acreage Disturbed 52 12

3/17/2009 9:56:32 AM

Fugitive Dust Level of Detail Default

20 lbs per acre-day

On Road Truck Travel (VMT) 0

Off-Road Equipment

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase Mass Grading 1/16/2012 - 12/12/2014 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed 208.5

Maximum Daily Acreage Disturbed 52.12

Fugitive Dust Level of Detail Default

20 lbs per acre-day

On Road Truck Travel (VMT) 0

Off-Road Equipment

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase Trenching 3/21/2016 - 8/19/2016 - Default Trenching Description

Off-Road Equipment

2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase Paving 8/22/2016 - 1/20/2017 - Default Paving Description

Acres to be Paved 52.12

Off-Road Equipment

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

3/17/2009 9:56:32 AM

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase Building Construction 1/23/2017 - 5/17/2024 - Default Building Construction Description

Off-Road Equipment

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase Architectural Coating 5/20/2024 - 5/23/2025 - Default Architectural Coating Description

Rule Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

3/17/2009 9:56:52 AM

Urbemis 2007 Version 9 2 4

Detail Report for Annual Construction Mitigated Emissions (Tons/Year)

File Name L \DRAFT\3706q\Global\meadowood urb924

Project Name Meadowood Construction

Project Location South Coast AQMD

On-Road Vehicle Emissions Based on Version Emfac2007 V2 3 Nov 1 2006

Off-Road Vehicle Emissions Based on OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Mitigated)

	<u>CO2</u>
2012	1,170 01
Demolition 01/03/2012- 01/13/2012	19 33
Fugitive Dust	0 00
Demo Off Road Diesel	18 60
Demo On Road Diesel	0 00
Demo Worker Trips	0 73
Mass Grading 01/16/2012- 12/12/2014	1,150 68
Mass Grading Dust	0 00
Mass Grading Off Road Diesel	1,109 78
Mass Grading On Road Diesel	0 00
Mass Grading Worker Trips	40 90
2013	1,196 53
Mass Grading 01/16/2012- 12/12/2014	1,196 53
Mass Grading Dust	0 00
Mass Grading Off Road Diesel	1,153 99
Mass Grading On Road Diesel	0 00
Mass Grading Worker Trips	42 53

3/17/2009 9:56:52 AM

2014	1,196 53
Mass Grading 01/16/2012- 12/12/2014	1,136 93
Mass Grading Dust	0 00
Mass Grading Off Road Diesel	1,096 52
Mass Grading On Road Diesel	0 00
Mass Grading Worker Trips	40 41
Fine Grading 12/15/2014- 03/18/2016	59 60
Fine Grading Dust	0 00
Fine Grading Off Road Diesel	57 48
Fine Grading On Road Diesel	0 00
Fine Grading Worker Trips	2 12
2015	1,196 53
Fine Grading 12/15/2014- 03/18/2016	1,196 53
Fine Grading Dust	0 00
Fine Grading Off Road Diesel	1,153 99
Fine Grading On Road Diesel	0 00
Fine Grading Worker Trips	42 53

3/17/2009 9:56:52 AM

2016	467 58
Fine Grading 12/15/2014-03/18/2016	256 73
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3/17/2009 9:56:52 AM

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Building Off Road Diesel	294 84
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Building Worker Trips	2,399 39
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Building 01/23/2017-05/17/2024	3,391 77
Building Off Road Diesel	295 97
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Building Worker Trips	2,408 64
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Building 01/23/2017-05/17/2024	3,366 44
Building Off Road Diesel	293 71
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Building Worker Trips	2,390 62

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Building Worker Trips	919 47
Coating 05/20/2024-05/23/2025	19 86
Architectural Coating	0 00
Coating Worker Trips	19 86
2025	12 63
Coating 05/20/2024-05/23/2025	12 63
Architectural Coating	0 00
Coating Worker Trips	12 63

Construction Related Mitigation Measures

The following mitigation measures apply to Phase Fine Grading 12/15/2014 - 3/18/2016 - Default Fine Site Grading/Excavation

Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by

PM10 84% PM25 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by

PM10 5% PM25 5%

For Soil Stabilizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by

PM10 44% PM25 44%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

3/17/2009 9:56:52 AM

The following mitigation measures apply to Phase Mass Grading 1/16/2012 - 12/12/2014 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by

PM10 84% PM25 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by

PM10 5% PM25 5%

For Soil Stabilizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by

PM10 44% PM25 44%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by

PM10 61% PM25 61%

Phase Assumptions

Phase Demolition 1/3/2012 - 1/13/2012 - Default Demolition Description

Building Volume Total (cubic feet) 0

Building Volume Daily (cubic feet) 0

On Road Truck Travel (VMT) 0

Off-Road Equipment

3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase Fine Grading 12/15/2014 - 3/18/2016 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed 208.5

Maximum Daily Acreage Disturbed 52.12

Fugitive Dust Level of Detail Default

20 lbs per acre-day

On Road Truck Travel (VMT) 0

Off-Road Equipment

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

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3/17/2009 9:56:52 AM

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1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase Trenching 3/21/2016 - 8/19/2016 - Default Trenching Description

Off-Road Equipment

2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase Paving 8/22/2016 - 1/20/2017 - Default Paving Description

Acres to be Paved 52.12

Off-Road Equipment

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase Building Construction 1/23/2017 - 5/17/2024 - Default Building Construction Description

Off-Road Equipment

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

3/17/2009 9:56:52 AM

Phase Architectural Coating 5/20/2024 - 5/23/2025 - Default Architectural Coating Description
Rule Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100
Rule Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50
Rule Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250
Rule Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100
Rule Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250